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U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE ATTY. DOCKET NO. ASMJP.065AUS

APPLICATION NO.

09/779,397

**APPLICANT** Michael A. Todd

FILING DATE February 7, 2001

## U.S. PATENT DOCUMENTS FILING DATE NAME SUBCLASS EXAMINER DOCUMENT NUMBER DATE CLASS (IF APPROPRIATE) -INITIAL 4,781,942 11/01/88 Leyden et al. 2, 4,863,755 09/05/89 Hess et al. 01/16/90 4,894,352 Lane et al. 4. 4,992,306 02/12/91 Hochberg et al. 5,011,706 04/30/91 5. Tarhay et al. 6. 5,028,566 07/02/91 Lagendijk 7. 5,231,058 07/27/93 Maeda et al. 8. 5,240,813 08/31/93 Watanabe et al. 9. 5,314,724 05/24/94 Tsukune et al. 10. 5,324,539 06/28/94 Maeda et al. 5,380,555 01/10/95 11 Mine et al. 12. 5,433,786 07/18/95 Hu et al. 13. 5,494,712 02/27/96 Hu et al. 14 5,554,570 09/10/96 Maeda et al. 15 5,563,105 10/08/96 Dobuzinsky et al. 16 5,703,404 12/30/97 Matsuura 17. 5,840,821 11/24/98 Nakano et al. 18 5,876,798 03/02/99 Vassiliev 19. 5,989,998 11/23/99 Sugahara et al. 20 5,998,522 12/07/99 Nakano et al. 21. 6,045,877 04/04/00 Gleason et al. 22. 6,051,321 04/18/00 Lee et al. 23. 6,051,508 04/18/00 Takase et al. 6,054,379 04/25/00 Yau et al. 25. 6,068,884 05/30/00 Rose et al.

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\*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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	FOREIGN PATENT DOCUMENTS							
EXAMINER		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
INITIAL	} {			†		·	YES	NO
	26.	WO 97/40207	10/30/97	PCT	1	1	Х	
	27.	WO 99/55526	11/04/99	PCT		7	Х	
	28.	EPO 367 004 B1	12/15/93	EPO			х	
<del></del>	29.	EP 0 436 185 B1	03/20/96	EPO			Х	
	30.	EP 0 723 600 B1	07/07/99	EPO EPO	1/		х	
	31.	EP 0 771 886 A1	05/07/97	EPO EPO		/	х	
···	32.	EP O 935 283 A2	08/11/99	EPO EPO			х	
	33.	EP 0 960 958 A2	12/01/99	EPO			х	

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)							
W	34.	Bayer et al., Overall kinetics of SiOx remote-PECVD using different organosilicon monomers, Surface and Coatings Technology, 116-119 (1999) 874-878						
	35.	Berjoan et al., XPS and XPS valence band characterizations of amorphous or polymeric silicon based thin films prepared by PACVD from organosilicon monomers, J. Phys. IV France 9 (1999) pp. 1059-1068.						
	36.	6. Constant et al., Some Properties of amorphous SiXC1-x (H) alloys prepared by CVD from various organosilicon compounds, Solid State Chemistry, 1982 pp. 267-270						
	37.	Deville et al., An AES study of the Influence of carbon on the chemical structure of some oxide films deposited by PECVD of organosilicon precursors, Applied Surface Science 137 (1999) 136-141						
	38.	Fonseca et al., Plasma Polymerization of Tetramethylsilane, Am. Chemical Society, 1993, 5, 1676-1682						
	39.	Induce et al., Mass spectroscopy in plasma-enhanced chemical vapor deposition of silican-oxide films using tetramethoxylsilane, Thin Solid Films 316 (1994) 79-84						
	40.	Inoue et al., Spectroscopic studies on preparation of silicon oxide films by PECVD using organosilicon compounds, Plasma Sources Sci. Technol. 5 (1996 339-343						
	41.	Loboda, M.J., New solutions for intermetal dielectrics using trimethylsilane-based PECVD processes, Microelectronic Enginering 50 (2000) 15-23						
	42.	Nguyen et al., Plasma organosilicon polymers, J. Electrochem. Soc., August 1985, pp. 1925-1932						
	43.	Shirafuji et al., PE-CVD of Fluorocarbon/SiO composite thin films using C4F8 and HMDSO1, Plasmas and Polymers, Vo. 4, No. 1, 1999, pp. 57-75						
	44.	Shirafuji et al., PE-CVD of fluorocarbon/silicon oxide composite thin films from TFE and HMDSO, Mat. Res. Soc. Symp. Proc. Vol. 544, pp. 173-178						
	45.	Shirefuji et al., Plasma copolymerization of tetrafluoroethylene/hexamethyldisiloxane and In Silu Fourier Transform infrared spectroscopy of its gas phase, Jpn. J. Appl. Phys. Vol. 38 (1999) pp. 4520-4526						
	46.	Sugahara et al., Low Dielectric constant carbon containing SiO2 films deposited by PECVD technique using a novel CVD precursor, DUMIC Conference, Feb. 10-11, 1997, pp. 19-25						
$\mathbb{V}$	47.	Thomas et al., Plasma etching and surface analysis of a SiC:H films deposited by low temperature plasma enhanced chemical vapor deposition, Mat. Res. Soc. Symp. Proc. Vo. 334, 1994, pp. 445-450						
	48.	Matsuk, N., U.S. Patent Application No. 09/243,156 Silleons Polymer insulation film on semiconductor substrate and method for forming the film, file Pebruary 2, 1989:  NOT A PUBLICATION  OM,-1570.DOC:gem032701						

EXAMINER

DATE CONSIDERED

\*EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 608; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED, INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.

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## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(USE SEVERAL SHEETS IF NECESSARY)

ATTY. DOCKET NO. ASMJP.065AUS

SMJP.065AUS

APPLICATION NO. 09/779,397

SHEET 1 OF 1

APPLICANT Michael A. Todd

FILING DATE February 7, 2001 GROUP 1762

EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
10	1.	Indrajit Banerjee, et al., "Characterization of Chemical Vapor Deposited Amorphous Fluorocarbons for Low Dielectric Constant Interlayer Dielectrics." J. Electrochem. Soc., Vol. 146(6), p. 2219 (1999).
V	2.	Sang-Soo Han, et al., "Deposition of Fluorinated Amorphous Carbon Thin Films as a Low-Dielectric Constant Material." J. Electrochem. Soc., Vol. 146(9), p.3383 (1999).
	3.	H. Beckers, et al., "Synthesis and Properties of (Triflouromethyl) trichlorosilane, a Versatile Precursor for CF3SI Compounds, " J. Organometal. Chem., Vol. 316, pp. 41-50, (1986).
	4.	C.A. Costello and J.J. McCarthy, "Introduction of Organic Functional Groups onto the Surface of Poly(tetrafluoreothylene)," Proceedings of the ACS Division of Polymeric Materials Science and Engineering, Vol. 55 p. 893 (1986).
	5.	K.G. Sharp and T.D. Coyle, "Synthesis and Some Properties of Trifluoro(trifluoromethyl) silane," J. Fluorine Chem., Vol. Q, pp. 249-251 (1971/72).
	6.	Limb, Scott J., et al., "Growth of fluorcarbon polymer thin films with high CF2 fractions and low dangling bond concentrations by thermal chemical vapor deposition," App. Phys. Lett., Vol. 68(20), p. 2810 (1996).
	7.	Washburne, Stephen S., et al. "Chloraminosilanes: I: The Preparation of Chloro(Dimethylamino) Hydrogen Silanes," Inorg. Nucl. Chem. Letters Vol. 5, pp. 17-19, Pergaomon Press. 1969
14	8.	Savage, Charles R., et al., "Spectroscopic Characterization of Films Obtained in Pulsed Radio-Frequency Plasma Discharges of Fluorocarbon Monomers," Structure-Property Relations in Polymers, pp. 745-768, American Chemical Society, (1993).
V	9.	Sharp, K.G., et al., "Perflouro(alkylsilanes). II: Trifluoro(trifluoromethyl) silane and Trifluoro(pentafluoroethyl) silane," Inorg. Chem., Vol. 11, No. 6, pp. 1259-1264, (4792): \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	10.	Pam—Frest—Gorder, "Researchers Pioneer Techniques to Lubicate Microdevicas," Research News, Ohio State University, http://www.acs.ohio-state.edu/units/research, (3/23/01): NoT A PUBLIC PLION

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	FOREIGN PATENT DOCUMENTS						
EXAMINER	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANS	LATION
INITIAL						YES	NO
V///	WO 99/60621	11/25/1999	PCT	/			
10	WO 99/41423	08/19/1999	PCT	17	7	7	
4	WO 99/21706	05/06/1999	PCT				7
	WO 97/41592	11/06/1997	PCT			7	
1/1	EP 0 706 216 A2	04/10/1996	Europe				
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EXAMINER INITIAL		OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)
	A.	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 03, 27 February 1998 (1998-02-27) & JP 09 293716 A (KAWASAKI STEEL CORP), 11 November 1997 (1997-11-11) *abstract*
140	B.	PATENT ABSTRACTS OF JAPAN vol. 1999, no.12, 29 October 1999 (1999-10-29) & JP 11 176829 A (INNOTECH CORP), 2 July 1999 (1999-07-02) *abstract*
	C.	Chandrasekhar et al., "New Silicon-Carbon Materials Incorporating Si <sub>4</sub> C Building Blocks" Mat. Res. Soc. Symp. Proc. Vol. 441, Materials Research Society (1997)
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